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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,290	12/28/2001	Roman D. Halko	20002.0227	2669
23517	7590	05/24/2004	EXAMINER	
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP			HUNTER, ALVIN A	
3000 K STREET, NW				
BOX IP			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20007			3711	

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

CS

Office Action Summary	Application No. 10/028,290	Applicant(s) HALKO ET AL.	
	Examiner Alvin A. Hunter	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-28 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-6 and 9-28 is/are rejected.
 7) ☒ Claim(s) 8 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 20 both recite the limitation "another synthetic resin." The limitation is indefinite because it encompasses more than what is disclosed in regards to synthetic resins.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 18, 20, 22, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoyama (USPN 5713801).

In regards to claim 17, Aoyama discloses multi-layer, wound golf ball comprising a center 115, an intermediate layer 120, a wound layer 125 of a tensioned material disposed over the intermediate layer and having a thickness less than 1mm, and a cover disposed over the wound layer (See Figure 2, Column 3, lines 11 through 15 and lines 39 through 46).

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In regards to claim 18, Aoyama discloses the center 115 comprised of polybutadiene (See Column 3, lines 34 through 38).

In regards to claim 19, the center has a diameter from about 1.2 to 1.6 cm being that the outside diameter is 1.4 to 1.8 inches and the thickness of the wound layer is 0.01 to 0.10 inches (See Column 3, lines 11 through 15).

In regards to claim 20, the tensioned material is glass, polyamide, or carbon (See Column 2, lines 49 through 60).

In regards to claim 22, Aoyama discloses the cover made of a thermosetting material, in particular balata, which is trans-polyisoprene (See Column 3, lines 19 through 22).

In regards to claim 27, Figure 2 shows the cover being a single layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 9-16, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyama (USPN) in view of Rajagopalan (USPN 6001930).

In regards to claim 1, Aoyama discloses multi-layer, wound golf ball comprising a center 115, an intermediate layer 120, a wound layer 125 of a tensioned material disposed over the intermediate layer and having the tensioned material is glass, polyamide, or carbon, and a cover disposed over the wound layer and made of a

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thermosetting material, in particular balata, which is trans-polyisoprene (See Figure 2, Column 3, lines 11 through 15, lines 39 through 46, and lines 49 through 60; Column 3, lines 19 through 22). Aoyama does not disclose the intermediate layer or the cover having a Shore D hardness. Rajagopalan discloses the Shore D hardness of the intermediate layer or cover being 20 to 75 (See Column 21, lines 4 through 14). One having ordinary skill in the art would have found it obvious to have a Shore D hardness of the intermediate layer or cover of Aoyama being 30 to 85, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 3, Rajagopalan discloses the intermediate layer component comprising at least two different thermoset components, a polyamide and a sulfonated thermoset polymer (See Column 5, lines 39 through 57).

In regards to claim 4, Aoyama discloses multi-layer, wound golf ball comprising a center 115, an intermediate layer 120, a wound layer 125 of a tensioned material disposed over the intermediate layer and having the tensioned material is glass, polyamide, or carbon, and a cover disposed over the wound layer and made of a thermosetting material, in particular balata, which is trans-polyisoprene (See Figure 2, Column 3, lines 11 through 15, lines 39 through 46, and lines 49 through 60; Column 3, lines 19 through 22). Aoyama does not disclose the intermediate layer or the cover having a Shore D hardness. Rajagopalan discloses the Shore D hardness of the intermediate layer or cover being 20 to 75 (See Column 21, lines 4 through 14). One having ordinary skill in the art would have found it obvious to have a Shore D hardness

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of the intermediate layer or cover of Aoyama being 30 to 85, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 5, Aoyama discloses the center 115 comprised of polybutadiene (See Column 3, lines 34 through 38).

In regards to claim 6, 9, and 10, the center has a diameter from about 1.2 to 1.6 cm being that the outside diameter is 1.4 to 1.8 inches and the thickness of the wound layer is 0.01 to 0.10 inches (See Column 3, lines 11 through 15).

In regards to claim 12, Aoyama does disclose the intermediate layer made of a thermoset material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoset material, in particular a sulfonated thermoset polymer, and a cover having a thermoplastic material, in particular polyolefin ionomer (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made of a thermoset and thermoplastic material, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 13, Aoyama does not disclose the intermediate layer having a thermoplastic material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoplastic material, in particular a sulfonated thermoplastic polymer, and a cover having a thermoset material, in particular polyisoprene (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made

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of a thermoplastic and thermoset material, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 14, Aoyama does not disclose both the intermediate layer and the cover having a thermoset material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoset material, in particular a sulfonated thermoset polymer, and a cover having a thermoset material, in particular polyisoprene (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made of thermoset materials, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 15, Aoyama does not disclose both the intermediate layer and the cover made of the same thermoset material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoset material and a cover having a thermoset material, wherein at least one of the layer comprises a thermoset material in particular a sulfonated thermoset polymer (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made of same thermoset materials, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 16, Aoyama, in Figure 2, shows the cover 130 being a single layer.

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In regards to claim 23, Aoyama does disclose the intermediate layer made of a thermoset material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoset material, in particular a sulfonated thermoset polymer, and a cover having a thermoplastic material, in particular polyolefin ionomer (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made of a thermoset and thermoplastic material, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 24, Aoyama does not disclose the intermediate layer having a thermoplastic material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoplastic material, in particular a sulfonated thermoplastic polymer, and a cover having a thermoset material, in particular polyisoprene (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made of a thermoplastic and thermoset material, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 25, Aoyama does not disclose both the intermediate layer and the cover having a thermoset material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoset material, in particular a sulfonated thermoset polymer, and a cover having a thermoset material, in particular polyisoprene (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of

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Aoyama made of thermoset materials, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 26, Aoyama does not disclose both the intermediate layer and the cover made of the same thermoset material. Rajagopalan discloses a golf ball having an intermediate layer having a thermoset material and a cover having a thermoset material, wherein at least one of the layer comprises a thermoset material in particular a sulfonated thermoset polymer (See Column 5, lines 39 through 57; and Column 6, lines 37 through 43. One having ordinary skill in the art would have found it obvious to have the intermediate layer and cover of Aoyama made of same thermoset materials, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

In regards to claim 28, Aoyama does not disclose the intermediate layer or the cover having a Shore D hardness. Rajagopalan discloses the Shore D hardness of the intermediate layer or cover being 20 to 75 (See Column 21, lines 4 through 14). One having ordinary skill in the art would have found it obvious to have a Shore D hardness of the intermediate layer or cover of Aoyama being 30 to 85, as taught by Rajagopalan, in order to improve the distance, durability and feel of the golf ball.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2 and 21 may be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich, can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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